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**HUMAN RESOURCES**

**No. 3**

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**USSR REPORT**  
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## LABOR

### PLAN FOR LABOR RESOURCE MANAGEMENT IN LVOV

Kiev RABOCHAYA GAZETA in Russian 7 Feb 80 p 2

[Article by M. Dolishniy, director of the Lvov section of the Institute of Economics, UkrSSR Academy of Sciences, Doctor of Economic Sciences: "How to Manage Labor Resources"]

[Text] Lvov economists propose a comprehensive program aimed at achieving an efficient distribution of labor in industry.

Improvement in the management of labor resources is an important condition for increasing production efficiency. Our party and government devote constant attention to this problem. Today, as scientific and technical progress is being further intensified, it acquires particular significance.

Proceeding from the particular importance and timeliness of this problem, the CC CPSU and USSR Council of Ministers in the decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality," and in subsequent documents as well, indicated the need to develop and implement a large number of social and economic measures aimed at solving the problem.

In our view, one of these measures should be the development of comprehensive programs for the purpose of managing labor resources; this would guarantee an integrated and systematic approach to solving the problem. This means exerting purposeful influence on the processes of organization, distribution, redistribution, and employment of labor resources at all mutually related stages of the management cycle, taking into account the interests of both the plant and society--as well as those of the individual--as an organic combination. For it is only in this way that one can count on attaining high efficiency in social labor.

Since the process of organizing and reproducing labor resources takes place on regional levels as a rule, what arises primarily is the need to develop appropriate programs which will permit us to solve the problem comprehensively, starting with the requirements of specific regions, branches of industry, and plants. Such a program will to a significant degree assist us in overcoming

the tendency toward unjustified quantitative increases in manpower and in revealing and efficiently employing intra-industrial reserves of manpower, stressing those intensive factors in development which ensure that our society successfully accomplishes its economic and social tasks.

The collective of the Lvov Section of the Institute of Economics of the UkrSSR Academy of Sciences together with party and planning bodies, and also with labor bodies, is developing a comprehensive program for organizing and efficiently employing the labor resources in the Lvov region one which has a long-term focus--up to 1990. A decree of the UkrSSR Academy of Sciences recommended making it a model for all the regions in the republic.

The program provides first for the most efficient distribution of labor resources among the branches and spheres of the economy, the economic zones, and settled areas; second, an improvement in the qualitative composition of the work force and its training, improvement in the work and living conditions of the workers; and third the discovery and determination of manpower reserves and their most efficient employment, with a guarantee of a high degree of output from the labor fund, the strictest economization, acceleration of the pace of scientific-technical progress and so forth.

The program consists of two basic sections: the mechanization and automation of labor consuming processes and of heavy manual labor, and local organization of the region's labor resources.

The work on compiling the program to mechanize manual labor in the industry of Lvov region for the years 1980-85 is already complete, done with the use of computers. It is intended to free 25,000 persons from manual labor, of which more than half will be women.

A methodological council created in the party obkom is in charge of developing and implementing the program. Analogous councils exist in the city and rayon party committees.

Much work has also been completed on the second section of this comprehensive goal oriented plan which, as a whole, is to be implemented in three phases. It remains, primarily, to comprehensively study the employment of labor resources in the region, its separate branches and spheres; and to analyze the potential work force reserve, to determine the degree of its labor intensiveness, productivity and turnover. Next, an analytical evaluation and correlation of the acquired data will be done, and measures will be developed and substantiated which are aimed at increasing the efficiency of labor resources in the region.

It is envisioned that measures will be developed to professionally orient, professionally select, and adapt personnel in industry, transportation, the service realm, and so forth, to reduce their turnover, and to involve the yet unemployed populace in social production--particularly in the mountains and foothills of the Carpathians. It is planned to create a number of new branches of the economy in the coal, mining, and chemical industry regions; these will permit the most efficient employment of women.

It is planned that methodological and organizational provisioning for all the measures developed to increase the efficient use of labor resources will be accomplished during the third and final phase of the implementation of this comprehensive, goal oriented program. Taking into account the highly dynamic nature of the labor factor, we are faced with the task of creating an automated system to manage labor resources, based on the existing labor departments.

Thus, the goal oriented program involves organizational, socio-economic, and informational-technical tasks. It is being developed in accordance with a single, scientifically based method on the following levels and by territorial cross section: enterprise or organization, rayon, city and oblast. This will aid in taking fullest account of the reserves and factors involved in increasing labor productivity in all sections of the economy and in balancing the demands for manpower.

Of course, the development of a comprehensive, goal oriented program is only half the problem. The second half is the successful implementation of the program, which requires that joint, purposeful actions be taken by party, council, and economic bodies.

Along with conducting a great deal of organizational work, it will also be required that certain economic incentives be developed to promote the most rational and efficient use of labor resources. In particular, measures should be envisioned which will ensure material concern of enterprises in uncovering and releasing work force reserves, incentives for the released workers, and so forth. Placement of such freed manpower should be entrusted to special organizations. The Bureau of Job Placement and Information can play an important role in this matter.

The experience gained in distributing manpower through city bureaus in many of the country's cities, including Lvov, provides a basis for drawing conclusions about the unquestioned utility of these comparatively new organs. First, unorganized movement of labor resources has diminished; second, the work time lost by those who have moved from one enterprise to another of their own volition has decreased; third, the issues involved in the placement of youth are being most efficiently resolved.

Based on an analysis of the accumulated information, the possibility has emerged of planning measures which facilitate bringing order to the migration of the populace and reducing various kinds of losses which arise during the redistribution of the work force. This expansion in the scale of organized job placement stems from the need to improve the work of the bureaus and to strengthen their ties to enterprises and organizations. In increasing the efficiency of their work the job placement bureaus should more fully use the rights granted them in controlling the activity of the plant personnel departments on the issues of work force availability and its quantitative correspondence to the planned labor limits.

On the one hand, economically and administratively effective measures should be developed and introduced to exceed the planned or maximum strength; on the other hand, the system of incentives should be improved and expanded to ensure the growth of production without an increase in the workers involved or with a decrease in their number.

The bureaus must make the pay and incentive scale directly dependent upon success in reducing personnel turnover. We must think about providing financially for the bureaus' activity through levies on the enterprises based on their share of workers. Statistical accounting needs improvement; it should reflect the dynamics of motion and personnel movement by branch of industry and regional cross-section and give precise information on personnel turnover. We are faced with the need to intensify the work of the committees on labor resources in the ispolkoms of the soviets of people's deputies.

Besides that, it is essential, in our view, to establish interoblasts, inter-rayon, and even interfacility bodies to study the most important issues in regulating the use of labor resources, taking into account the local labor supply level. In every microrayon and industrial center it is the councils of directors that must set the tone on the issues of redistribution of the work force, its requalification, and retraining.

The management of labor resources is a multifaceted problem. Thus, it demands a comprehensive approach which does not permit local deviation or partial implementation. For we are speaking about a task with significance for the state, and it must be resolved nationally.

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CSO: 1828

## LABOR

### UZBEK EFFORTS TO IMPROVE LABOR PRODUCTIVITY

Tashkent PRAVDA VOSTOKA in Russian 19 Jan 80 p 2

[Article by Professor and Doctor of Economic Sciences A. Abduganiyev, Director of the Uzbek Branch of the USSR State Committee for Labor and Social Problems' Scientific Research Institute of Labor, and Candidate of Economic Sciences G. Azbukin, sector chief: "Improving Labor Efficiency"]

[Text] The CPSU Central Committee and USSR Council of Ministers Decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Improving Production Efficiency and Work Quality" proposes the broadest possible participation of the workers in carrying out the intent of the economic program. "We must learn to fight more effectively to increase efficiency," points out Comrade L. I. Brezhnev. And the main thing in the fight to increase efficiency is people, their skill, mood at work, high principles and business-like attitude at all levels of production.

Unfortunately, there are still quite a few labor collectives in the republic which are not meeting their plans. They are to blame for the fact that Uzbekistan industry has not been able to increase production volume in accordance with the growing potential, for a shortfall of many millions of rubles worth of output. That is why, given introduction of the new system of economic indicators, it is necessary to reveal existing shortcomings, in order to eliminate the possibility that they might be repeated.

The presence of shortcomings is reflected first of all in the generalizing indicator of social production efficiency, the rates of growth and level of labor productivity. Therefore, industry and the entire national economy are now faced with the task of closing all channels of losses. The problem of losses of materials and labor resources is not only an economic problem, but also an important political problem impacting directly on the mood and labor activeness of production workers.

The significance of labor productivity growth can be judged from the following example. Today, a one-percent rise in labor productivity nationwide is equivalent to increasing output by more than five billion rubles. Such is the scale of our economy today on whose background any kind of loss is

especially perceptible. However, it must painfully be pointed out that last year, some enterprises of the republic had lower labor productivity than in the preceding period.

Among the causes of this slowing of the rate of labor productivity growth, one of the most important is the decrease in discipline, order and organization in production. At his time, V. I. Lenin warned that "equipment prescribes unconditionally the strictest discipline and greatest accuracy when each person does that portion of the work indicated to him, at the risk of stopping the entire job, damaging machinery or spoiling the product." And it is today all the more important that self-discipline, organization and unswerving observance of labor discipline become law for each worker and employee.

At the same time, the number of absences per worker in republic industry remains high, especially at enterprises of agricultural machine building, the Ministry of Building Materials Industry and Ministry of Light Industry. For this reason alone, republic industry loses hundreds of thousands of man-days each year.

According to time-and-motion studies made at a number of enterprises, workers in the basic shops used only 80-85 percent of their time in carrying out shift assignments, and the figure is 60-65 percent for certain shops. In this regard, 70-90 percent of the losses of working time do not depend on the workers themselves, but are associated with shortcomings in labor organization, especially in planning and servicing production.

And it was for good reason that the CPSU Central Committee and USSR Council of Ministers decree gave a special place to collective forms of labor organization, in particular to the brigade form, which must become the basic one in the 11th Five-Year Plan. This form of labor organization is especially attractive because of the high level of mutual responsibility of collective members for end work results.

Unfortunately, payment sometimes does not correspond to output in collectives drawn up on such principles of labor organization. In particular, the average output per worker in contractor brigades of the republic Ministry of Construction in 1978 was 51.8 percent higher than for the ministry as a whole, but the wages of workers in such collectives turned out to be 5.5 percent lower than the average level.

In order to widely disseminate progressive forms of labor organization and introduce everything new and advanced, we need the collective participation of workers, specialists and representatives of all enterprise services. It was in precisely this way, on the basis of personal (brigade) creative worker plans, that a system for increasing production efficiency was set up at the Tashkent Standard-Unit Machine Tool Plant. This enterprise's method consists of a scientifically substantiated complex of labor planning at each work-place. A lead production assignment is set for each worker whose labor is subject to rate-setting; that assignment is based on the average hourly

output actually achieved by him and the planned labor productivity growth, improved work quality and economy in material resources. Detailed analysis of the fulfillment of personal plans has become the main substance of foremen and shop chief reports on work in the preceding 24-hour period at the plant.

The experience of leading enterprises shows that labor productivity growth outlined by each person in the personal creative plans must in the aggregate yield an increment in production volume under the state plan. But the volume of output obtained as a result of the compilation of personal worker plans must correspond to shop plans, which in turn determine the planned output volume of the plant as a whole. Such a system permits linking the activity of the entire plant to the labor of each worker.

The task of increasing labor effectiveness is being solved somewhat differently at the Tashkent Aviation Production Association imeni V. P. Chkalov. Here, they are introducing a system of planned preventive maintenance of workplaces whose basic aim is to meet plan assignments by each worker on each shift. Intrashift losses of working time at the plant have been reduced from 12-15 percent to 5-6 percent, labor productivity has increased by 6-7 percent and wages have increased by 3-4 percent as a result of the introduction of this system.

A comprehensive labor organization system is also being introduced successfully by the collective of the "Uzbekzoloto" production association. Work results indicate that production volume, labor productivity and, as a result, wages as well are increasing significantly here.

In Angren, I. A. Maslov's brigade of miners, working under the contract method, has reduced normative time by 20.4 percent and ensured labor productivity growth of 13 percent over the planned level. Multipurpose brigades led by F. Girfanov and T. Klyzhabayev have also achieved high indicators here.

Quite a few examples of the successful introduction of progressive methods of labor organization in the republic national economy could be cited. However, this process has not yet received extensive dissemination, unfortunately. The forms and methods of evaluating both plan fulfillment and workers' labor directly must be improved in order to ensure the large-scale changeover of labor collectives to a higher degree of labor organization. End results, output quality and labor productivity assignment fulfillment must be the basis for payment, and that is possible if worker wages are increased only as labor productivity increases. "Wages must be earned," Comrade L. I. Brezhnev stressed in his speech at the 16th Trade Union Congress.

The tasks of building communism which have evolved also demand improvement in party supervision of economic activity at enterprises. The work experience of the Rostov party organization and the Krasnodarskiy Kray party committee confirms that, along with their internal tasks, enterprises are finding it necessary to solve important problems encompassing the entire city,

rayon and oblast. These are problems of personnel policy, exchange of technical innovations, leading experience, and so on. The solution of these problems in Rostov and Krasnodar has enabled all enterprises to meet their plans. We also have experience in our republic. The Chirchik gorkom has created an initiative group consisting of leaders of city industrial enterprises and institutes under the chairmanship of the gorkom second secretary; this group is entrusted with monitoring the solution of problems concerning all city enterprises.

The party and government decree arouses us to actively search out effective new ways of improving the economic mechanism.

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## LABOR

### BRIEFS

LIVING STANDARD--The social program of the CPSU is being consistently translated into reality. During the 1970's, the population's real per capita income increased 1.5-fold. In 1979, the average monthly earnings of workers and employees came to 163.5 rubles, as opposed to 116.9 rubles in 1969. Payments and benefits received by the population from public funds of consumption increased from 59.7 billion rubles in 1969 to 110 billion rubles in 1979. In just the Tenth Five-Year Plan, more than 1.6 trillion rubles will be allocated for the current consumption of the population and for the construction of living quarters, facilities for public health, education and culture, and for other industries outside the sphere of production. This is as much as was spent during the Seventh and the Eighth five-year plans taken together. Currently, more than 140 million people, more than 80 percent of the working population, have a higher or secondary education (complete or incomplete). More than 108 million people improved their living conditions in the 1970's, and this is more than 40 percent of the country's population. Text Moscow EKONOMICHESKAYA GAZETA in Russian No 9, Feb 80 p 17 8885

LABOR PRODUCTIVITY--Labor productivity in industry increased by 14 percent in four years of the Tenth Five-Year Plan. It has been set forth by the state plan for the economic and social development of the USSR to raise industrial labor productivity by 3.8 percent. More than four fifths of the overall growth of industrial production should be assured owing to this factor. The rise in labor productivity, even if only one percent in conditions of 1980, assures, with the same number of workers, an additional production output of more than 6 billion rubles. This additionally gives the national economy approximately 5 million tons of petroleum and gas condensate; 3 billion cubic meters of gas; 6 million tons of coal; 1.2 million tons of steel; 18,000 motor vehicles; approximately 90 million square meters of textiles; 6 million pairs of shoes; and a considerable number of other consumer goods. Text Moscow EKONOMICHESKAYA GAZETA in Russian No 9, Feb 80 p 17 8885

CSO: 1828

## EDUCATION

### REALISTIC VOCATIONAL SCHOOL ENROLLMENT QUOTAS URGED

Moscow SOVETSKAYA ROSSIYA in Russian 11 Jan 80 p 2

#### Article: "1. Plans and Reality"

Text The academic year has long since begun, but the pages of the Ural newspapers, as in the past, are full of announcements about acceptance to vocational and technical schools. Autumn has passed and winter has arrived, but thousands of places in them are still empty. This has been the case in the Urals both last year and two years ago.

How is this to be explained? By the noted demographic slump? Statistics actually confirm that another "wave" has approached. The first came right after the war. The second arrived when the sons of those who perished had to step up to machine tools and to the steering wheels of combines. Now should be the time for their grandchildren to go to educational institutions in the field and at the plant... But every year the number of graduates of eighth and tenth classes of general education schools grows smaller. The first signs of an increase will come only in 1985. And, of course, it is necessary to take this into account.

However, parallel with this, the planned quota for the acceptance of students in the vocational and technical schools of Russia grows every year. Tens of new such schools are opening. Their number is approaching 4,000, and the number of places in them at desks and machine tools will soon reach 2 million.

In a word, it turns out that the curves indicating the demand of the system of vocational and technical education and the availability of graduates of schools are diverging. The RSFSR State Committee for Vocational and Technical Education, of course, knows about this.

Let us say that an oblast sends disturbing estimates, trying to explain what is causing the increasingly protracted period for filling its vocational school enrollments. And in answer it receives a list of long

since completed recruitment procedures, an enumeration of advice and recommendations ("to intensify," "to devote attention," "to eliminate," and "to demand), a strict order to complete recruitment in the shortest possible time.

This is what the correspondence is like in Chelyabinskaya Oblast, which already in the summer of last year reminded the State Committee that the unified plan-estimate approved by the oblast ispolkom sets forth the enrollment of 21,300 graduates of the eighth class in vocational and technical schools. But it was determined by the plan of the State Committee that 23,800 students would be accepted in secondary and rural schools. This gap is especially felt between the graduates of rural schools and the plan for the admission into rural vocational and technical schools, about half the number of girls and 71 percent of the boys are expected to be enrolled...

In a month the Chelyabinskaya Oblast Administration repeats its inquiry:

"Again we ask for a plan of admissions to vocational schools for 1979 which corresponds to available resources. Despite the outlook and estimates, despite requests and reminders, the State Committee has increased the plan for admission to general purpose schools by 450 people, and for secondary schools by 1,700 people. At the same time, the number of graduates of the eighth class of general education schools has been reduced by 5,000 people and comes to 49,500 in all."

The State Committee agrees only to a negligible reduction after not less harsh directives of the directors of oblast administrations appear. The directors of the schools are making calculations around the clock and chime in amongst themselves as to who suddenly has about 10 extra people! Instructors are stealing into VUZ's and teknikums like intelligence officers where entrance examinations are being conducted, and then they wait for the students' classroom breaks still longer, hoping that perhaps the first complexities in someone's studies will undermine their former aspirations. Armed with colored booklets, the envoys of vocational and technical education also appear at secondary schools in hopes of enticing even one student from those who have enrolled for studies in the ninth class. Production training foremen are sent to plant shops to attempt, with a guaranteed unskilled wage, to transfer to a vocational school those who came to work directly after school.

A recruitment point for a state vocational and technical school was even opened at a train station in Sverdlovsk in order to invite every teenager whiling away the time waiting for a train. Despite this, tens of vocational schools have not met their established enrollment quotas for many years.

But when the planned figure is finally achieved, the proper report flies to the capital, although with a considerable delay, and everyone breathes easier, and they begin to prepare for the next year's recruitment which again is increased by nearly 2,000 people.

And, in fact, what is the situation in other vocational schools? After all, there actually are a great many krais and oblasts where vocational and technical schools have no such problems.

It is best to stand next to a map of Russia to answer this question. It is enough to plot the number of active vocational and technical schools in the territory of each oblast, kray or autonomous republic to have it immediately brought to one's attention how unevenly their network is developed. For example, while in Permskaya Oblast there are 85 day vocational and technical schools in which 48,000 teen-agers are enrolled and which must recruit 31,000 each year, in Krasnodarskiy Kray 64 such schools with 31,000 students recruit 23,000 in all every year.

How is this disproportion to be explained? A shortage of workers in a region, even the most severe shortage, cannot be a basis for a sober calculation. Our needs are very often at variance with possibilities, and it is necessary to take this into account. Therefore, planning must rest not on good wishes, but on completely concrete economic indicators.

In our case, numbers could be the criterion. But what about Permskaya Oblast with its developed network of vocational and technical schools for a population a full 1.5 million less than Krasnodarskiy Kray? Is the rate of its growth different? No. This indicator is higher for the southerner. Finally, what is the number of graduates of the eighth and the tenth classes? In approximately equal proportions, it is directly dependent upon the size of the population and is also significantly higher in Krasnodarskiy Kray.

And here the thought arises, don't the elements, the natural course of things "administer" the development of the network of vocational and technical schools.

Of course, there is an essential difference in the economic characteristics of these regions. In Krasnodarskiy Kray the need for agricultural machine operators is certainly greater than for metallurgists. It is possible to take into account the different shortages in the work force in general, the different natural increments and levels of population migration.

Does all this just signify that the network of vocational and technical schools can develop regardless of economic logic and that the density of the network itself is wholly dependent upon the local and industrial views of the problem? However, the State Committee for Vocational Education of Russia has devoted all its organizational work just toward determining

which and how many students to recruit. Most often, the "capacity" of vocational schools is the primary basis for such planning. And industrial ministries most often build vocational and technical schools at their own discretion.

In the Urals they have known since the war that the most impressive five-year plan statistics depend upon, first of all, high qualifications and the reliable education of personnel. And therefore it was necessary to ask few to turn their heads toward vocational and technical schools. Large plants built buildings and workshops for their workers, provided them with modern equipment and gave up their best skilled craftsmen. People like Aleksandra Pavlovna Klimova, master of the Perm vocational and technical school, Fedor Fomich Vereshchagin, power shovel operator, both Heroes of Socialist Labor, and hundreds of other masters.

But, within the federation there are still many oblasts where the network of vocational and technical schools still lags behind our current demands. It turns out that where there are many such schools there are more and more empty places at the machine tool and behind the desk. And where there are not enough vocational schools there is an abundance of graduates of the eighth and tenth classes. This is explained by the fact that quite different tasks in terms of their complexity confront the oblasts and krays. In some there is still a clear reserve for filling the schools. And in others reserves are exhausted and it is necessary to "embolden" them with strict directives.

Will such a frankly old method of administration be sufficient for long? And aren't the unoccupied places in the vocational schools too expensive for the state? While we wait for 1985 when the number of school graduates finally begins to grow again it is necessary to search for a way out of this difficult situation in which the RSFSR State Committee for Vocational Education has gotten itself into.

Is it possible to temporarily enroll a developed network of vocational schools of some regions with graduates of schools from another oblast in which the system of vocational and technical education still lags in development? In other words, to conduct the principle of vocational and technical school recruitment in accordance with the principle of the distribution of students. After all, every year Ural administrators fill their vocational schools with difficulty while thousands of their graduates are sent to other regions of Russia.

The manipulated "distortion" in the development of the republic's network of training institutions for vocational and technical education also leaves its mark on the directives of the RSFSR Gosplan. The "capacity" of vocational schools is also a basis for the recruitment plans which the krays and oblasts receive from it. And there are no modifications permitted for the actual number of graduates of the eighth and tenth classes upon which enrollments are primarily dependent.

Moreover, there are examples where, for the sake of its own tranquillity, Gosplan evidently simply covers its eyes to the clear discrepancies of its directives.

It was planned for Chelyabinskaya Oblast to admit 5,800 people in its tekhnikums for 1979. Meanwhile, it has been well known for a long time that 70 of the oblast's tekhnikums belonging to 30 ministries and departments admit almost 8,000 students every year and do not seriously rely on those coming from other oblasts (equally as many depart from Chelyabinskaya Oblast). But try to put true figures into the plan and gaps will immediately open in other "articles," primarily in vocational and technical education. This means that one end will not coincide with the other again, and, therefore, to pretend that you don't know the true demands is much simpler.

The oblast ispolkoms which are faced, in this way, with not completely realistic tasks, in turn, send dispatches of protest to Gosplan, which most often do not yield any results.

What do those think about this who must take all this into account and introduce the necessary administrative amendments? V. Kholomonov, deputy chairman of the RSFSR State Committee for Vocational and Technical Education, agrees that the problems about which we speak actually exist and that it is necessary to search for a solution together with the republic's Gosplan. A. Dondysh, A. Vinogradov and K. Kyazimov, directors of State Committee administrations, also have admitted this.

"You have correctly formulated the questions," reaffirmed P. Shumenkov, director of a department of RSFSR Gosplan. "But their solution primarily depends upon the State Committee for Vocational and Technical Education. In the first place, it is precisely it which must bring order to its complex operation. We are currently developing a unified plan for the enrollment of the ninth classes, the vocational and technical schools and the tekhnikums for the next five-year plan."

In practice, it turns out that both responsible departments, instead of coordinating their efforts in the closest possible way, are only blaming each other.

Unfortunately, there is no such cooperation in the mutual relations of the RSFSR ministries of education and the republic's State Committee for Vocational and Technical Education. But about this in the next report.

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CSO: 1828

EDUCATION

'IZVESTIYA' CRITICIZES WORK OF TEACHER-TRAINING ESTABLISHMENTS

LD210947 Moscow IZVESTIYA in Russian 15 Mar 80 Morning Edition p 1 LD

[Editorial: "Teacher"]

[Excerpt] The CPSU Central Committee November plenum devoted special attention to fostering a sense of responsibility in every working person and strengthening labor discipline. This was reemphasized in the CPSU Central Committee, USSR Council of Ministers and AUCCTU resolution "On Further Strengthening Labor Discipline and Reducing Cadre Turnover in the National Economy." The discipline of teaching work is a broad concept embracing not only strict observance of the daily school routine. It also embraces the teacher's creative growth, the ability to make a lesson profound and emotional in form and content and the teacher's own self-education. All this is acquired in school, but it takes shape in a future teacher while he or she is still a student.

Unfortunately, not all pedagogical institutes foster in their charges a high sense of duty and a sense of responsibility to society, children, the school and the cause to which they have decided to devote themselves. Recently the USSR Ministry of Education examined at a collegium meeting the question of the results of the allocation of young specialists to schools and preschool establishments. It was pointed out that in the first 4 years of the 10th Five-Year Plan 414,000 young specialists with higher education and 266,000 with secondary specialized education were assigned to schools and other teaching and educational establishments. The pedagogical institutes of Lithuania, Uzbekistan, Kirgizia, Kazakhstan and Latvia and many Ukrainian and RSFSR VUZ's fulfilled their plans for placing graduates in employment. At the same time there are still many shortcomings in allocating graduates of pedagogical VUZ's. In the Georgian SSR this plan has been fulfilled by only 66 percent. Things are no better in Tadzhikistan, Azerbaijan and Moldavia. It is also a disturbing fact that only 72 percent of university graduates assigned to schools turned up for work.

This attests to serious shortcomings in ideological education work in certain VUZ's and to miscalculations in carrying out teaching practice. It also indicates that the organization of these VUZ's' actual intake has not been sufficiently well thought out and that guidance on the teaching vocation is conducted badly. But in the Penza, Grodno, Daugavpils and other pedagogical institutes, where schools and faculties of future teachers have been set up, the students know for what they are striving and, on graduating from the VUZ's, willingly go where they are sent.

As regards the universities, unfortunately many of them inadequately prepare their charges for teaching activities. It is true that, following the CPSU Central Committee and USSR Council of Ministers resolution on higher schooling, their study plans have devoted more time to teaching practice and to a psychological-pedagogical cycle of disciplines. But very often the trouble is the very atmosphere in a VUZ, where hardly any attention is paid to guidance on the teaching vocation--which undoubtedly cannot fail to affect the graduates' specific aims.

Where a person is sent determines his destiny, and therefore it is necessary to adopt an attentive approach to everyone and take individual desires and interests into account. But at the same time it is necessary to cultivate these desires and interests. For the assignment of young specialists is the concluding stage in the work of every VUZ. Its educational activity is largely evaluated in terms of whether all its graduates turn up at their job on time.

CSO: 1828

EDUCATION

BRIEFS

NEW VUZ OPENS IN ASHKHABAD--A sixth VUZ in the city was created based on the economics department of Turkmen University. More than 2,000 students are enrolled in day and correspondence departments. Two large wings of a building complex in a region of the city being built are placed at the disposal of students. Available to students are training auditoriums, laboratories, cafeterias, dormitories and assembly and sport auditoriums. The institute will graduate approximately 500 specialists in the national economy this year. [Text] [Moscow PRAVDA in Russian 16 Feb 80 p 6] 8885

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## DEMOCRAPHY

UDC 911.3:31.2

### SHIFTS IN USSR POPULATION DISTRIBUTION

Leningrad IZVESTIYA VSESOYUZNOGO GEOGRAFICHESKOGO OBSHCHESTVA in Russian  
No 1, Jan-Feb 80, pp 3-10

[Article by O. A. Konstantinov and A. A. Yepikhin]

[Text] The preliminary results of the 1979 All-Union Census (6) provide an opportunity to draw several conclusions as to changes in USSR population distribution both during the preceding period between censuses and as compared to the preceding period.

These changes are a result, as we know, of migration, on the one hand, and differences in natural population movement, on the other.

The utilization of natural resources and large-scale industrial and transport construction in the eastern and northern regions have drawn population from the older, long-settled parts of the country. While the USSR population increased nine percent during the 1970-1979 period, it doubled in the nine years between censuses in Khanty-Mansiyskiy and Yamalo-Nenetskiy autonomous okrugs, where a very large new region of petroleum and gas industry developed. In Kamchatskaya and Magadanskaya oblasts, the increase was 32 percent, in Yakutia -- 26 percent, in Murmanskaya Oblast -- 21 percent, and in a majority of the remaining administrative-territorial units (ATE's) of the Far East -- 15-18 percent, and so on.

In contradistinction to this, in 23 ATE's of the Nonchernozem belt, the Chernozem center, the woodlands and forest-steppe regions of the Ukrainian SSR, the total population in 1979 was less than in 1970. The reduction occurred

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1. As of the 1979 census date [17 January 1979], the USSR had the following administrative-territorial structure: 121 oblasts, six krays, two territories of republic subordination, 20 ASSR's, and seven union republics with no divisions into oblasts. There were a total of 156 administrative-territorial units (ATE). There were 174 ATE's when autonomous oblasts (8) and autonomous okrugs (10) are included. In connection with the creation of new oblasts after 1970 and with resultant change in the borders of several old oblasts, 1979 can be compared with 1970 for 164 or 161 ATE's.

exclusively at the expense of rural population centers. The loss of residents there was so considerable that it could not be covered by growth in urban population. In several ATE's (Kalininskaya, Kostromskaya, Kurskaya, Orlovskaya and other oblasts), there is now 25-30 percent less rural population than in 1970.

Differences in natural population movement, primarily in birth rate, exert a great influence on the territorial distribution of the population. While the birth rate was 13-16 per thousand in the RSFSR, Ukrainian SSR, Belorussian SSR and the Baltic republics, it was 28-36 per thousand in the Central Asian republics (7). Therefore, given an average USSR population increment of nine percent during the 1970-1979 period, in the first group of republics it was 6-8 percent and in the second -- 28-31 percent.

The aggregate influence of migration processes and differences in natural population movement have led to a gradual redistribution of population on the country's territory (Table 1).

Table 1. Proportion of Union Republic Population in USSR Total Population

union republic	1959	1979
RSFSR	56.28	52.41
Ukraine	20.05	18.96
Belorussia	3.86	3.64
Uzbekistan	3.89	5.87
Kazakhstan	4.45	5.60
Georgia	1.94	1.91
Azerbaijan	1.77	2.30
Lithuania	1.30	1.29
Moldavia	1.38	1.50
Latvia	1.00	0.96
Kirgizia	0.99	1.35
Tadzhikistan	0.95	1.45
Armenia	0.84	1.15
Turkmenistan	0.73	1.05
Estonia	0.57	0.56
USSR	100.00	100.00

As we see, during 1959-1979 the proportions of the RSFSR, the Ukraine and Belorussia decreased appreciably and those of the Baltic republics and Georgia dropped somewhat. For these seven republics, their proportion of the USSR population dropped from 85.0 to 79.7 percent, that is, by 5.3 percent. Correspondingly, the other eight republics increased their proportion by that same 5.3 percent. This occurred primarily due to a higher birth rate and in part to a positive migration balance.

Under the impact of differences in population size dynamics, there was also a slight redistribution west to east (beyond the Urals). The proportion of

the latter was 21.8 percent in 1959, 24.1 percent in 1970 and 25.9 percent by 1979, that is, an increase of 4.1 percent over a 20-year period. Such are the results of ambitious efforts to accelerate development of the eastern regions of the country. Moreover, Central Asia and Kazakhstan, with their higher birth rates, accounted for 17.2 million, or 76 percent, of the 22.6 million by which their population increased during 1959-1979, and Siberia and the Far East accounted for only 5.4 million, or 24 percent. In spite of the rich natural resources of our eastern regions, the European part of the USSR is reducing its proportion of the country's productive forces very slowly, in view of its own great advantages (1, 6).

Population redistribution is occurring not only for the country as a whole, but also within the individual union republics and large economic regions. Thus, the RSFSR's proportion in the European territory decreased from 80.8 to 79.7 percent over the 20-year period, that is, by 1.1 percent. Within the Ukrainian SSR, the proportion of the Southwestern region decreased appreciably (from 45.5 to 43.4 percent), in spite of rapid growth in Kiev and other cities, the proportion of Donetsko-Pridneprovskiy region remained practically unchanged (from 42.4 to 42.3 percent), and the Southern region showed strong growth (from 12.1 to 14.3 percent).

In general, the proportion of the southern portions of the country increased. Thus, the proportion of USSR population accounted for by the Moldavian SSR, the Southern region of the Ukraine, the Northern Caucasus and the Transcaucasus taken together increased from 14.0 to 15.5 percent over the 20-year period, and if Central Asia and Kazakhstan are added, from 25.0 to 30.8 percent. There has been an obvious population shift to the southern part of the country. This is a result of both higher birth rates and migrational mobility. The role of these factors is dissimilar in different parts of the South.

Here are several examples of population redistribution within the large economic regions. In the Central Chernozem region, the proportion of Belgorodskaya Oblast, with its extensive construction associated with the Kama Motor Vehicle Plant, increased from 15.8 to 16.7 percent; in the West Siberian region, the proportion of Tyumenskaya Oblast increased from 9.7 to 14.6 percent; in the Northwestern region, the proportion of Leningradskaya and Murmanskaya Oblasts and the Komi ASSR increased from 54.8 to 61.7 percent and the proportion of Novgorodskaya and Pskovskaya oblasts decreased from 15.5 to 11.8 percent; in the Central region, the proportion of Moscow Oblast increased from 44.2 to 49.6 percent; the same can be said about Kiyevskaya Oblast in the Southwestern region, and so on. In the latter examples, a decisive role was obviously played by the fact that very large capital cities are located in these oblasts.

Thus, there were great differences in the population size dynamics of individual ATE's, and both in their populations as a whole and in the populations of their two main subdivisions -- urban and rural areas. The situation for the country as a whole is reflected in Table 2.

Table 2. ATE Population Size Dynamics in the Period Between Censuses

type of dynamic	number of ATE's		
	1939-1959*	1959-1970*	1970-1979
urban and rural population growth	33	72	50
urban population growth covered by loss of rural population	61	71	91
urban population growth not covered by loss of rural population	46	11	23
loss of urban and rural population	2	1	--
<b>total</b>	<b>142</b>	<b>155</b>	<b>164</b>

\*data for 1939-1959 and 1959-1970 based on (3).

In 1970, the proportion of ATE's with rural population losses had decreased from 77 percent in 1959 to 54 percent, and by 1979, it had risen to 70 percent; the geographic range of such ATE's is expanding.

Here, we approach the most important shift in USSR population geographic distribution -- towards an intensifying displacement of people from rural settlements to urban ones. During the 1970-1979 period, 15.6 million villagers became urbanites. This occurred primarily through migration and only partly through the transformation of rural settlements into urban ones. It not only absorbed the entire natural increment in the rural population (8.7 million people), but also led to an absolute reduction of 6.9 million in rural population. The proportion of urban population rose from 56 to 62 percent. The Soviet Union is becoming an increasingly urban country. We should be noting in this regard the very important fact that the increase in the size of the USSR urban population is occurring increasingly through natural increment. Its proportion was 17.9 percent in 1926-1939, 21.3 percent in 1939-1959, 40.5 percent in 1959-1970 and 43.5 percent in 1970-1979.

The rates of growth in the urban population continue to be high. During the 1959-1970 period (that is, over 11 years), it increased by 36 million, or an average of 3,273,000 per year, and in the 1970-1979 period (that is, over nine years), it increased by 27.6 million, or an average of 3,066,000 per year. During both periods, the urbanization factor rose by an identical six percent (48-56-62).

Change in this factor by individual ATE reveals great differences (Table 3, page following).

Attention is called to the fact that there have been cases in the USSR of a reduction in the percentage of urban population. They have occurred primarily in Tadzhikistan where, in spite of rapid growth in the urban population (23 percent as against 20 percent for the USSR as a whole), the size of the rural population has increased even more rapidly (36 percent), which has also led to a slight reduction in the urbanization factor for Tadzhikistan (from 37 to 36 percent).

Table 3. Change in Urbanization Factor During the 1970-1979 Period

percent	number of ATE's	percent	number of ATE's
-2	1	9	8
-1	2	10	9
0	2	11	10
1	11	12	8
2	8	13	1
3	11	14	1
4	16	15	2
5	18	18	1
6	17		
7	15	total	161
8	20		

In terms of this indicator, all ATE's are divided into three more or less equal groups. There are 50 ATE's whose increment has been close to the average, that is, 5-7 percent; 51 ATE's were below the average and 61 were above. Belgorodskaya and Kurskaya oblasts and Khan'-Mansiyskiy Autonomous Okrug were in first place in terms of increase in urbanization factor. It is worth mentioning that many ATE's of the nonchernozem zone (Smolenskaya, Pskovskaya, Novgorodskaya, Vologodskaya, Kostromskaya and many other oblasts) were found to have double the union-average increment in urbanization factor.

The redistribution of residents of our country in favor of urban settlements has led to an increase in the number and proportion of ATE's with a higher percentage of urban population. Here is what a comparison of data over a 20-year time segment shows (Table 4).

Table 4. ATE Distribution By Proportion of Urban Population

urban population proportion, in percent	1959	1970	1979
upwards of 80	5	8	16
71-80	9	13	22
61-70	10	25	31
51-60	24	23	36
41-50	18	33	28
31-40	37	33	24
21-30	35	15	11
20 or less	17	5	6
total	155	155	174

Inasmuch as new oblasts were created during the period between censuses and there was therefore less territory in several old oblasts, the data of Table 4 are not fully comparable. Still, they show that the predominance of urban over rural population is expanding geographically. The number of

ATE's in which a majority of the population lives in urban settlements has more than doubled (from 48 to 105) over those 20 years, and their proportion has risen from 31 to 60 percent: three-fifths of the ATE's are more urban than rural.

Among the most important indicators of population displacement shifts is the concentration of population in large cities (more than 100,000 people).<sup>1</sup> During the 1970-1979 period, their number grew from 221 to 272 and the number of residents in them increased from 48.6 to 97.5 million, that is, doubled; their proportion of the urban population increased from 55.5 to 59.6 percent, and their proportion of the total population -- from 20.1 to 37.2 percent. This reflects the process of productive forces concentration which is occurring in our country (10). It is also expressed in the fact that ATE's are being saturated with newer and newer cities. In 1959, there were a total of four ATE's with five or more large cities. In 1979, there were 11, and the number of large cities in them had increased from 22 to 72. In 1959, there were large cities in 99 of the ATE's, and in 1979 -- in 139. The geographic range of dissemination of the large cities is expanding. This is also a manifestation of shifts in USSR population. The proportion of large cities in the urban populations of the individual ATE's is continuously increasing (Table 5).

Table 5. ATE Distribution By Proportion of Large-City Residents in Urban Populations

zz	1959	1970	1979
more than 80	5	4	5
71-80	9	18	22
61-70	17	19	26
51-60	18	34	39
41-50	25	23	22
31-40	20	20	18
21-30	4	12	7
less than 20	1	--	--
no large cities	45	14	17
total	144	144	154

As regards the increase between 1970 and 1979 in the number of ATE's without large cities from 14 to 17, this occurred for 10 of 14 oblasts created after the 1970 census and in the main sparsely populated (for example, Narynskaya Oblast -- 228,000, Kurgan-Tyubinskaya -- 268,000, Issyk-Kul'skaya -- 353,000, and so forth) in which there are as yet and could not be any large cities. Of the 14 ATE's in which there were no large cities in 1979, seven remained

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1. Inasmuch as there are now a great many cities of 100,000 or more, the question arises of raising the population size level for the "large cities" concept.

so by 1979.<sup>1</sup> In 1979, some 8.4 million people lived in the 17 ATE's without large cities, or 3.2 percent of the population. Thus, almost all the USSR population turns out to be under the influence of large cities.

The large-city population concentration is uneven across the country, and the differences between individual ATE's are very large, which is to a certain extent associated with dissimilar growth rates, as is evident in Table 6.

Table 6. Large-City Distribution by Population Size Dynamics in 1970-1979

zz	ATE centers	not ATE centers	total
more than 200	--	6	6
181-190	1	1	2
171-180	2	--	2
161-170	1	1	2
151-160	7	2	9
141-150	21	4	25
131-140	23	16	39
121-130	44	28	72
110-120	40	42	82
100-110	2	25	27
less than 100	--	6	6
total	141	131	272

Here, attention is called first to the large cities whose populations decreased in 1970-1979. They were the well-known coal centers of Prokop'yevsk, Leninsk-Kuznetskiy, Kiselevsk, Anzhero-Sudzhensk, Kopeysk and Novoshakhtinsk. Second, the cities which are growing especially rapidly. They merit presentation in a list (Table 7).

Table 7. Large Cities With the Highest Growth Rates in 1970-1979

	1970	1979	1979 in zz of 1970
Naberezhnyye Chelny	37,000	301,000	814
Nizhnevartovsk	15,000	109,000	727
Surgut	34,000	107,000	315
Nizhnekamsk	48,000	134,000	279
Staryy Oskol	51,000	115,000	225
Tol'yatti	250,000	502,000	201
Shevchenko	59,000	110,000	186
Zelenograd	72,000	130,000	181
Samarkand	216,000	476,000	179
Ternopol'	84,000	144,000	171
Bukhara	111,000	185,000	167
Kolpino	70,000	114,000	163

1. Incidentally, the fact that an ATE is sparsely populated need not be an obstacle to the formation of a large city if favorable conditions are present. The best example is the young (1973) Mangyshlakskaya Oblast, with a center of 110,000 and a total population of 252,000.

As we see, cities of the most different natures are distinguished by higher population growth rates. They include the largest new projects (the first seven cities) and the intensively industrializing oblast center of Ternopol' and cities growing fast due to expansion of their territories -- Samarkand and Bukhara -- and the largest suburbs of Moscow and Leningrad -- Zelenograd and Kolpino.

The urban population of the USSR increased 20 percent in the 1970-1979 period. However, there were substantial differences between cities which are ATE centers and cities not performing these administrative functions. Distributing large cities into four groups based on population size dynamics in 1970-1979 and assuming divisions at 200, 120 and 100 percent, we obtain the following breakdown (Table 8).

Table 8. Differences in Large-City Population Growth Rates as a Function of Their Administrative Functions

zz	ATE centers		not ATE centers	
	absolute	zz	absolute	zz
more than 200	--	--	6	4.6
120-190	99	70.2	52	39.7
100-120	42	29.8	67	51.1
less than 100	--	--	6	4.6
total	141	100.0	131	100.0

Not counting the first six cities, ATE centers clearly grew faster than non-centers. This reflects the long-established trend of accelerated growth in a majority of the ATE centers. Incidentally, this is confirmed by a comparison of the ATE main-city population in ATE total population in 1959 and 1979. Only about 30 percent of those cities had a lower proportion. It increased even in those cases when that proportion had already been quite high.<sup>1</sup>

This trend is characteristic primarily of the long-established administrative centers. Turning to the 51 cities which became large cities in the 1970-1979 period, they included a total of 10 ATE centers.<sup>2</sup> On the other hand, all the most rapidly growing cities are generally not ATE centers (except for Shevchenko). This is the case with a great many cities which became

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1. Omsk, from 81.8 to 82.5 percent; Tomsk, from 69.2 to 74.3 percent; Semipalatinsk, from 69.6 to 77.3 percent; Batumi, from 73.6 to 77.0 percent; Frunze, from 66.5 to 77.8 percent; Dushanbe, from 58.1 to 79.9 percent; Ashkhabad, from 48.7 to 71.4 percent; Petropavlovsk-Kamchatskiy, from 61.0 to 68.9 percent; Khar'kov, from 60.5 to 63.0 percent; Minsk, from 65.1 to 68.7 percent, and so on.
2. Abakan, Karshi, Kokchetav, Lutsk, Magadan, Nukus, Ternopol', Urgench, Chardzhou, Shevchenko.

large cities in 1970-1979 which are well-known industrial centers: Solikamsk, Severodonetsk, Al'met'yevsk, Almalyk, Usol'ye-Sibirskoye, and others. They also include Angren, which, unlike the six coal cities and their population reduction mentioned earlier, had a significant increase in population (from 76,000 to 106,000, or 39 percent).

A large part of those cities which moved into the category of "100,000 residents" during the 1970-1979 period were those which formed "district centers" or second cities which in some measure developed as a counterweight to the main (first) city. Thus, for example, there has long been a trend in Lithuania for individual parts of the republic to gravitate towards its five most important cities: Vil'nyus, Kaunas, Klaypeda, Shaulyay and Panevezhis. They have formed their own kind of districts (in fact, but not administratively).<sup>1</sup> The first two have long been large cities, Klaypeda became one in the preceding period between censuses, and the other two became large cities during the 1970-1979 period. In Ul'yanovskaya Oblast, Dimitrovgrad (formerly Melekess) became a large city. It had long been a center for the left-bank region, a sort of "district center" for that part of the trans-Volga area. Velikiye Luki was for some time an oblast city. After losing its administrative duties, it has continued to this day to be a center of gravity for the southern portion of Pskovskaya Oblast. Its transformation into a large city was entirely consistent. Tartu has always been the second city of Estonia, but it has stopped being just a scientific and academic center; industry has grown up around it, and this quiet university town has been transformed into a large city. Kineshma was not only the second city and an important industrial center of Ivanovskaya Oblast, but also the Volga port for a considerable portion of the region between the Volga and the Klyaz'ma. In view of the fact that Kamyshin has now crossed the 100,000 limit, there are now 19 large cities on the banks of the Volga.<sup>2</sup>

In examining the large cities of the USSR, we must not fail to note that one-fifth of them consist of cities created in Soviet times. Among them are Kraganda (572,000), Novokuznetsk (541,000), Tol'yatti (502,000), Dushanbe (493,000), Kemerovo (471,000), Magnitogorsk (406,000) and many others.

Shifts in population distribution are distinctly manifested in the increase in the number of cities with populations of over one million. In 1959, there were a total of three such cities; in 1970 there were nine, with a population of 19.1 million, or 14 percent of the urban and 7.8 percent of all population. In 1979, there were already 18 cities of a million or more; living in them were 32 million people, or 19.5 percent of the urban and 12.2

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1. Much is now being written, especially by B. S. Khorev (2), for example, about the importance of changing over to district [okrug] units.
2. Kalinin, Rybinsk, Yaroslavl', Kostroma, Kineshma, Gor'kiy, Cheboksary, Kazan', Ul'yanovsk, Tol'yatti, Kuybyshev, Syzran', Balakovo, Saratov, Engel's, Kamyshin, Volzhskiy, Volgograd and Astrakhan'.

percent of the total population of the country. Several cities will undoubtedly cross the one-million line soon (Table 9), as has already happened in the case of Perm'.

Table 9. Population Growth in the Largest USSR Cities (in 1,000 residents)

	1939	1959	1970	1979
Moscow*	4,133	5,046	6,941	7,831
Leningrad*	3,015	2,900	3,543	4,073
Kiev	847	1,104	1,632	2,144
Tashkent	550	912	1,385	1,779
Khar'kov	833	934	1,223	1,444
Gor'kiy	644	942	1,170	1,344
Novosibirsk	404	886	1,161	1,312
Minsk*	237	509	907	1,262
Kuybyshev	390	806	1,045	1,216
Sverdlovsk	423	779	1,025	1,211
Dnepropetrovsk	527	660	862	1,066
Tbilisi	519	695	889	1,066
Odessa	602	667	892	1,046
Chelyabinsk	273	689	875	1,031
Baku*	544	643	852	1,022
Donetsk	466	699	879	1,021
Yerevan	204	509	767	1,019
Omsk	289	581	821	1,014
Perm'	306	629	850	999
Kazan'	398	647	869	993
Ufa	258	547	771	969
Rostov-on-Don	510	600	789	934
Volgograd	445	592	818	929
Alma-Ata	222	456	730	910

\*excluding urban settlements subordinate to the city soviet

Future USSR Central Statistical Administration publications with 1979 census materials will provide an opportunity to analyze shifts in USSR population distribution more fully.<sup>1</sup> But what we have been able to reveal using the preliminary results shows quite distinctly the main outlines of this important process in the life of our country.

They consist of the following:

1. The influence of differences in natural increment on population redistribution throughout the country is growing.
2. The proportion of Siberia and the Far East in USSR population size is growing more slowly than is required to develop their productive forces.

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1. For analyses using materials from preceding censuses, see, for example, works (3, 4, 5, 9, 11 and others).

3. The proportion of southern portions of the country, including regions of labor surpluses in them, in the USSR population is increasing.
4. Population redistribution between cities and the countryside is continuing at rapid tempos, that is, labor resources are shifting from rural areas to urban settlements.
5. The number and size of the large cities are increasing, the geographic range of their distribution is expanding and new cities of a million or more residents are appearing, which reflects the intensifying process of productive forces concentration here (10).
6. The number of large cities actually performing the functions of district centers is increasing.

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## DEMOGRAPHY

### DEMOGRAPHIC CHANGES IN USSR; WHAT THE FIGURES SHOW

Moscow MOSCOW DAILY NEWS in English No 12, Apr 80 p 10

[Text] The book "Population of the USSR" recently published in Moscow generalizes the data obtained at the latest population census held in 1979 (preliminary data was published earlier). We asked Professor Boris Uralanis, a prominent Soviet demographer, to comment on the figures contained in the book.

#### Third Place in the World

From the time of the preceding census in 1970 the USSR population increased from 241,700,000 to 262,400,000 people, or by 20,700,000.

The Soviet Union now comes third, after China and India, in the world for the size of its population. It is followed by the USA (222,000,000), Indonesia (150,000,000), and Brazil (120,000,000). The population in our country grows by approximately one percent a year. This is not a very big figure, but it is much bigger than in any of the West European countries. In some of them the population has ceased to grow at all, and in the FRG the number of deaths has exceeded that of births since 1972.

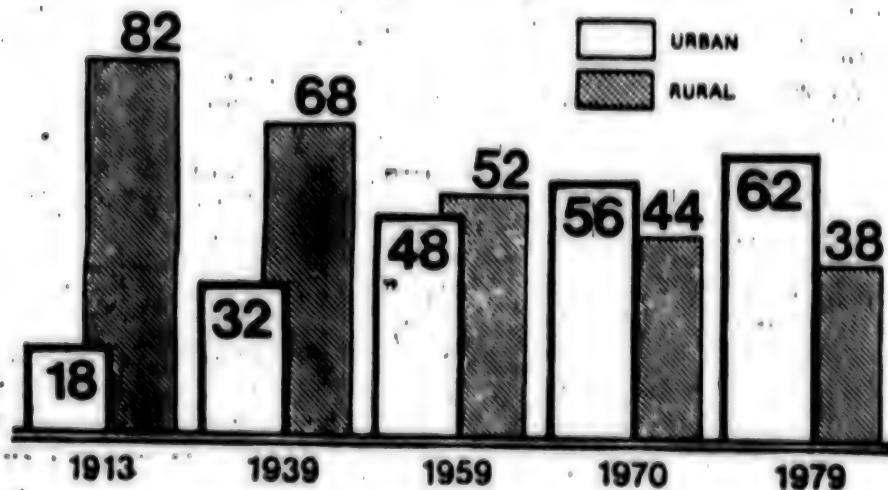
The census showed new changes in population distribution between town and countryside in the nine years the urban population increased by 27,600,000 while the rural population decreased in 1970, 50 percent of the population lived in cities, and by 1979 this figure had increased to 62 percent. There are several reasons for these changes. In some cases villages expand and are given city status. In other cases rural residents move to cities. Agricultural work continues to be mechanized intensively, leading to increased productivity and a reduction in the demand for manpower.

#### The War's Echo

The rural dwellers find jobs in industry, transport, construction and the service industries. The training of workers in different trades in the USSR is free and is paid for out of the national budget, so the farmers of yesterday easily acquire new trades. The USSR has had no unemployment

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CHANGES IN THE URBAN AND RURAL POPULATION  
IN PERCENTAGE OF TOTAL POPULATION



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for over 50 years now. The number of people employed in social production now equals some 135,000,000 and continues to grow. This is 17 percent more than was registered by the previous census.

However, the rate of growth of the labour force in the USSR is slowing down, and this will continue throughout the 1980s. This is caused by a decline in the birthrate--one more echo of the war in which the USSR lost over 20,000,000 people--for, naturally, there are no offspring from the children that might have been born to the men and women who died in the war.

The Soviet demographers predicted this well beforehand, making it possible to adopt the necessary measures to alleviate the situation. The country intensified production and raised labour productivity by better organization mechanization and automation.

As to the future of the population in the USSR, we must say that our country is within the general world trend. It looks as though the forecast, made by UN experts and by many prominent Soviet specialists long ago, and which generated skeptical sneers at the time, is now coming true--the world is in for underpopulation rather than otherwise, and for a shortage of workers. This may well become an extremely grave problem. It is highly probable that the number of earthmen will stop growing by the mid-21st Century, and it is doubtful whether it will exceed 12,000 million.

Men's and Women's Educational Standards  
[Per 1,000 of each sex]

Year	higher		secondary	
	men	women	men	women
1939	16	9	120	95
1950	34	32	400	399
1970	68	62	586	589
1979	102	98	708	703

#### Education to All

The census produced data on the educational standards of Soviet people. The USSR now has nearly 15,000,000 people with a higher education, an increase of 79 percent in the nine years. The number of people with a secondary education doubled. We have recently transferred to compulsory complete secondary education for all children with ten years of studies in a general secondary school. Eight of every ten working people today have a higher or secondary education. Another feature is that the number of women workers with diplomas per 1,000 is the same as that of working men. The woman in the USSR is guaranteed by law remuneration equal with the man's for equal work, as well as equal opportunities in acquiring education and a trade. And, as we see, our women capitalize on these rights.

A difference in educational standards still exists between the urban and the rural population. But it is evening out gradually. Before World War II there were 300 percent more specialists with diplomas in the cities than in the countryside. The latest census showed that now there are only 25 percent more. A high rate of improvement in educational standards among rural populations is a feature in all the Soviet Republics.

#### More Than 100 Nations

Interesting data has been obtained on the distribution of population according to nationality. More than 100 nations and ethnic groups, both large and small, populate the USSR. Russians are the biggest nation--137,000,000 people or over half the country's population. Ukrainians are another big nation--over 42,000,000. If we add the Belorussians (9,500,000) then the total Slavic population will be 190,000,000 or nearly three-quarters of the USSR population.

We have also really small ethnic groups. For example, there are only 800 Yukaghirs (they live in the Far North of the country).

The majority of nationalities have increased their numbers.

Over half the population works in the economy; 2.5 percent of the people study and receive scholarships; pensioners comprise over 15 percent. The census shows that a large number of pensioners have retained their health and continue working. In many cases the working pensioners have the right to both wages and pensions. The USSR has the lowest retirement age in the world--55 years for women and 60 for men. In a number of trades it is 5-10 years lower. Therefore, many people, when nearing pension age, are both able and willing to go on working.

#### Average Family

The census disclosed that the USSR has 66,300,000 families. Of these, 30 percent consist of two people, 30 percent of three, and the other 40 percent have four, five, six and more family members. The average size of the family is 3.5 people. In the 1970 census the average family was slightly bigger--3.7 people. This reduction is explained in part by the decline in the birthrate in some areas and partly by the improved situation in housing facilities, which enables the young families to live separately from their parents.

As before, we still have somewhat more women than men. This is also one of the consequences of World War II. The gap, however, is gradually closing. The men-women ratio has, in the main, became even among people below 50.

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